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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/875,458	06/05/2001	Craig F. Culver	IMM059A	6909

7590 05/30/2002
James R. Riegel
IMMERSION CORPORATION
801 Fox Lane
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EXAMINER

WU, XIAO MIN

ART UNIT	PAPER NUMBER
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2674

DATE MAILED: 05/30/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.
09/875,458

Applicant(s)
CULVER

Examiner
Xiao Wu

Art Unit
2674



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE THREE MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on _____
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 23-57 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 23-57 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____ 6) ☐ Other:

Art Unit: 2674

1. The numbering of claims is not in accordance with 37 CFR 1.126 which requires the original numbering of the claims to be preserved throughout the prosecution. When claims are canceled, the remaining claims must not be renumbered. When new claims are presented, they must be numbered consecutively beginning with the number next following the highest numbered claims previously presented (whether entered or not).

Misnumbered claims 50-58 have been renumbered as 49-57 since claim 49 is missing .

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 23, 28, 30-35, 40, 42-46, 50, and 53-57 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dunaway (US Patent No. 5,450,079) in view of Paley (US Patent No. 5,506,605).

As to claims 23, 30-35, 42-46, 52-57, Dunaway discloses a handheld control device (10) for interfacing with a host processor (72, Fig. 3) , the control device comprising: a housing (20) shaped to be held by a user; a movable user object (44, 46, 48) engageable by a finger of the user and movable in at least one degree of freedom with respect to the housing (e.g. vertical movement of the key); a sensor (e.g. key switch) operative to detect the motion of the user object in the degree of freedom; a local display screen (22) mounted on the housing and separate from the host

Art Unit:

processor, the display screen operative to display textual information related to a program running on the host processor and to assist the user in using the control device, and a wireless communication interface (66, 68) operative to transfer data from the control device to the host processor and from the host processor to the control device. It is noted that Dunaway does not disclose an actuator operative to provide tactile feedback to the user. Paley is cited to teach a handheld input device including an actuator operative to provide tactile feedback to the user (see 50, Fig. 3). It would have been obvious to one of ordinary skill in the art to have modified Dunaway with the features of the tactile feedback as taught by Paley because the tactile feedback can enhance its usefulness in various application (col. 2, lines 2-5).

As to claims 28, 40, 50, Dunaway discloses that the local display screen (22) has a touch-sensitive surface.

4. Claims 24-27, 36-39, 47-49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dunaway (US Patent No. 5,450,079) in view of Paley (US Patent No. 5,506,605) as applied to claims 23, 35 and 46 above, and further in view of Culver (US Patent No. 4,712,101).

It is noted that both Dunaway and Paley do not disclose a roller is moveable in two degree of freedom. Culver is cited to teach an input device including a roller which is moveable in two degree of freedom. It would have been obvious to one of ordinary skill in the art to have modified Dunaway and Panel with the features of the roller as taught by Culver, so as to provide a two dimensional cursor control.

Art Unit:

5. Claims 29, 41, 52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dunaway (US Patent No. 5,450,079) in view of Paley (US Patent No. 5,506,605) as applied to claims 23, 35 and 46 above, and further in view of Leiper (US Patent No. 6,184,862).

It is noted that Dunaway and Paley do not disclose a microphone for receiving voice commands from the user. However, combining a microphone in an input device is well known in the art such as taught by Leiper (see 50, Fig. 1). It would have been obvious to one of ordinary skill in the art to have modified Dunaway and Paley with the features of the microphone as taught by Leiper, so as to provide a voice command to the display system.

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. .

The US Patents 5,631,669, 6,069,614 and 6,107,992 are cited to teach an input device.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Xiao Wu whose telephone number is (703) 305-4721.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Hjerpe, can be reached on (703) 305-4709.

Any response to this action should be mailed to:

Art Unit:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 872-9314

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA.,
Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding
should be directed to the Technology Center 2600 Customer Service Office whose telephone
number is (703) 306-0377

xw

May 16, 2002



**XIAO WU
PRIMARY EXAMINER
ART UNIT 2674**